


<b>CERTIFICATE OF TRANSMISSION BY FACSIMILE (37 CFR 1.8)</b>			<b>Docket No.</b> <b>ZABF 104</b>
<b>Applicant(s): FIKRET M. ZABTCIOGLU</b>			
<b>Application No.</b> <b>10/804,648</b>	<b>Filing Date</b> <b>MARCH 19, 2004</b>	<b>Examiner</b> <b>N/A</b>	<b>Group Art Unit</b> <b>2652</b>
<b>Invention: HIGH RELIABILITY PARALLEL DATA TRANSFER HARD DISK DRIVE</b>			<b>RECEIVED</b> <b>CENTRAL</b> <b>JAN 12 2005</b>
<p>I hereby certify that this <u>PRELIMINARY AMENDMENT</u> (Identify type of correspondence) is being facsimile transmitted to the United States Patent and Trademark Office (Fax. No. <u>703-872-9306</u>) on <u>JANUARY 12, 2005</u> (Date)</p> <p><b>FIKRET M. ZABTCIOGLU</b> (Typed or Printed Name of Person Signing Certificate)</p> <p> (Signature)</p> <p><b>Note: Each paper must have its own certificate of mailing.</b></p>			

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1 impact shock occurs to the desktop or to the notebook as the system is running and this  
2 causes the head to ding as it is called in the field, to the hard disk surface, or sudden power  
3 failures result in head crash, or damage to heads or to surface. Nevertheless, it is desirable to  
4 have a fly height as close to the recording media as possible.

5 The low fly height and increased recording density can be understood from the  
6 following first equation that expresses the dependence of the length of a pulse width PW50  
7 obtained from a recording transition on the recording system.

$$8 \quad PW50 = \{g^2 + 4(d+a)(d+a+\delta)\}^{1/2} \quad (1)$$

9 where

10  $g$  = gap length of the recording head

11  $d$  = the distance separating the head and media

12  $a = 2Mr\delta/Hc$  (length of a recording transition)

13  $\delta$  = film thickness